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for communicating a duplicate invoice rejection message

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back to said vendor. C

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#### REMARKS

The above amendment and these remarks are responsive to the communication from Examiner Chang Y. Chung mailed 8 August 2000 in the above cited application, Paper No. 5.

#### DRAWINGS

The Draftperson has objected to the drawings 1-3B due to the poor quality of the lines, numbers and letters. Upon allowance of the case, applicants will submit formal drawing Figures 1-3B with lines, numbers and letters of the required quality.

#### 35 U.S.C. 103

Claims 1-9 have been rejected under 35 U.S.C. 103(a) over Klein (U. S. Patent 5,845,285) in view of Geer (U. S. Patent 5,930,778).

Applicants traverse the rejection of all of these claims on the basis that the Examiner has not established a prima facie case of obviousness. The art references on which he relies do not suggest a combination which reads on applicants claims and, in fact, both specifically teach away from applicants invention as claimed. The Examiner has in the rejection of these claims assembled a piecemeal reconstruction of prior art patents and official notice which could only be done if done in light of applicants disclosure. Such a reconstruction or combination is clearly based upon an improper hindsight view of the art after having the benefit of applicants' disclosure.

Applicants' invention provides a system and method for preventing duplicate invoices from entering a payment application (SAP). Once an invoice is identified as a duplicate, it is rejected electronically and in real-time, automatically returned to the supplier prior to entering the payment application (SAP) for invoice processing. This enables automated error notifications (aka 824 transactions) to be sent out EDI. An invoice is identified as duplicate if it is of the same vendor invoice, the same purchase order number, and the same item number, AND has not been previously washed (that is, the sum of such invoice items is greater than zero.) Thus, applicants define a duplicate invoice as follows:

"Referring to Figure 2, the auditing step 82 includes, in step 88, sorting the inbound invoices against SAP ,

production tables for same vendor and same vendor invoice number; in step 90, sorting hits from step 88 for same purchase order billed; in step 92, sorting hits from step 90 for same items billed on purchase order; and in step 94 sorting hits from step 92 to see if any item identified has a net sum  $> 0$ . If an item has net sum  $\leq 0$ , it is not a duplicate and is allowed in steps 98 and 86 to be posted to the accounts payable data base. If an item has net sum  $> 0$ , it is a duplicate, and a transaction back to the vendor is created in steps 96 and 84 to cancel the duplicate invoice." (Specification, page 11, lines 4-15.)

First, with respect to Klein. Klein relates to a neural network based system for auditing data in a database for detecting duplicate data. Data already entered into the database is sampled and audited. It is important to note that Klein is auditing a database by selecting a sample of entries in the database and applying a neural network analysis to that sample to identify, inter alia, duplicate entries.

Applicants' invention relates to preprocessing debit invoices before they are entered into the accounts payable database. Klein teaches a system for auditing a database to identify possibly duplicate entries for future analysis.

Klein simply does not perform the same function or achieve the same result as applicants' claimed invention. The Examiner

appears to recognize this point in stating that "Klein does not explicitly teach preprocessing of invoices", and "Klein does not explicitly teach introduction to and rejection from a accounts payable data base." (See page 3 of the Office Action.) He then relies on Kline and various assertions of "obvious to one of ordinary skill in the art..." not supported by reference to any specific teaching in the art, to reject applicants claims.

With respect to Geer. Geer relates to the efficient submission of checks and other financial instruments into the payment system for collection of funds. The Examiner asserts that Geer teaches "preprocessing of original invoices before introduction into a database". Applicants traverse this characterization. What Geer may properly be viewed as teaching is a data capture step, in which information from a check is obtained by electronic scanning and communicated electronically into a check clearing system by a payee. The whole objective of Geer is to electronically capture and transmit check data into the payment system so as, in his first example, to avoid the necessity of transferring the physical checks from the payee to the payor bank, or, in his second example, to allow check processing to continue through the payment system without waiting for the physical transfer of the checks. These checks are received by the payee from a customer together with a remittance advice, that is a payment stub or invoice copy, so that the check amount can be properly credited to the payee customer's account. Geer is not a system for receiving invoices

for payment, but rather a system for receiving checks in payment of invoices. There is no teaching in Geer of preprocessing invoices as claimed by applicants. Geer can only be fairly interpreted to teach that data from the checks are scanned and introduced into the payment system for subsequent checking and transaction reversal if, for example, it is determined that there are insufficient funds to cover the check or a stop order has been placed on the check.

Applicants invention relates to preprocessing of invoices to detect and reject duplicate invoices before they make it into the accounting system database. It is singularly important to realize that in Geer, a check or instrument submitted for collection is well into the financial system before action is taken for reversal.

"In the event of dishonor of a check by a payor bank, the process reverses as to the collection of the dishonored check, and this information may be transmitted electronically back through payment system 12 (or by more direct means of reversal) to depository bank 10 for unwinding the transaction and for debiting of the payee's account as to the dishonored check." (Geer, at Col. 9, lines 45-50.)

Thus, to the extent that Geer can be combined with Klein to be applied to applicants' invention, Geer teaches away from applicants' invention. It is this necessity for unwinding of transactions that applicants' invention prevents in the context of invoice processing.

Referring now to applicants claims.

With respect to claim 1, the Examiner states that Klein teaches at Col. 26, lines 38-43, rejecting data as duplicate without introducing the data into the system. Applicants traverse this reconstruction of Klein, who clearly states that "if necessary, the data may then be corrected" - there is no teaching in Klein that the data is checked for duplicate entries before being entered into the database being audited. In Klein, the data being audited is sampled from the database.

The Examiner then states that while Klein does not explicitly teach preprocessing of invoices (applicants agree), Geer discloses at Col. 6, lines 43-45, preprocessing of invoices. Applicants traverse this reading of Geer, who states at the place referenced by the Examiner:

Appropriate information from the checks is extracted and converted into electronic form for sorting, processing and transmission into and through the payment system. (Geer, col. 6, lines 41-44.)

This is merely a data entry step. The data is entered into the collection system and must be reversed if later found to be erroneous. This was discussed above, in connection with Geer, Col. 9 lines 45-50, where dishonored checks are finally identified, and the clearance process must be reversed.

The Examiner then states that Klein does not explicitly teach introduction to and rejection from a accounts payable data base (applicants agree), but then goes on to say Klein does suggest this feature at Col. 26, lines 40-44 and Col. 27, lines

22-25. Applicants traverse this characterization of Klein as previously discussed. The data being corrected by Klein is already in the database being audited. Applicants, on the other hand, have provided a specific pre-processing method to avoid entering into an accounts payable database invoices which, if entered, would be duplicates. Applicants have amended claim 1 to clarify this distinction over the art references, by reciting:

"...grabbing [an] inbound EDI invoice [file] files from [a vendor] vendors before [it is] they are input to an accounts payable database, said grabbing including sorting inbound debit invoices and credit invoices in credit/debit sequence and posting said credit invoices to said accounts payable database;

auditing in sequential order of receipt said debit invoices in said inbound EDI invoice [file] for a duplicate invoice item, a duplicate invoice item being an invoice item having a net sum > zero determined with respect to previously received invoices for the same vendor invoice designation, same purchase order number, and same item number..." (Claim 1.)

Applicants further assert that the Examiner has used impermissible hindsight, and applied applicants' own teachings against them in concluding that it would have been obvious to one of ordinary skill in the art to "introduce and reject data from an accounts payable database because this would allow filtering and sorting out to be implemented as soon as data is available." No reference or teaching on the record supports an assertion that it is desirable to detect duplicate data before entry to an accounts payable database, that is as soon as it is available, or as soon as possible, and the art references of Geer and Klein both teach otherwise.

With respect to claim 2, Klein is applied as above with respect to claim 1, but then official notice is taken to grab data before input into a database. However, in taking this notice, the Examiner is going specifically contrary to the teachings of Klein, which is sampling data already entered into the database for purpose of auditing, and which requires that duplicate or erroneous data be "corrected". In suggesting that inbound EDI invoice could be grabbed before inputting it into a database to allow detection of duplicate as soon as possible, the Examiner is improperly using applicants disclosure against their claim. The art does not suggest or even recognize the advantage of detecting duplicates as soon as possible, but rather much later, in the course of auditing data already entered.

With respect to claim 3, applicants simply traverse. The reading of Klein given by the Examiner to suggest Klein teaches the specific steps executed by applicants' claim 3 to identify duplicate invoices is simply and unquestionably a hindsight reconstruction of Klein based on applicants own disclosure. Applicants traverse the rejection of claim 3.

With respect to claim 4, and as previously discussed with respect to claim 3, the Examiner states that Klein does not explicitly teach grabbing an invoice from a vendor before it is input to an accounts payable database and creating a transaction



to a vendor. Applicants agree. However, applicants assert that only impermissible hindsight reasoning and the use of applicants disclosure against the claim provide any basis for the Examiner to take official notice of the grabbing step as is specifically defined by applicants. The only art applied in this case against any of the claims clearly require just the opposite: eventual detection of erroneous or duplicate data entries require that the database be corrected or entries reversed. That is precisely the problem in the art (entry of duplicate invoices into an accounts payable database that must be later reversed) that applicants' invention as claimed prevents.

With respect to claim 5, the Examiner's reliance upon Geer for the preprocessing step is not supported by the reference itself. As previously discussed, erroneous entries to the check clearance process of Geer must be reversed. The preprocessing which Geer done, and upon which the Examiner relies, is merely a data entry step. Checks which will not clear are identified much later, and must be reversed.

With respect to claim 6, the Examiner states that Klein does not explicitly teach grabbing, does not explicitly teach (the steps applicant claims for identifying duplicate invoices), does not explicitly teach communicating a duplicate invoice rejection message back to the vendor. Nowhere in the art of record is there any teaching of rejecting a computer detected duplicate invoice back to a vendor before it is entered into the

accounts payable database. Applicants assert that the only basis on which these teachings can be implied from Klein involves impermissible hindsight reconstruction of Klein based upon applicants own disclosure and requires that the specific teachings of Klein be discounted.

With respect to claim 7, the Examiner states that Klein does not explicitly teach grabbing an invoice before input to an accounts payable database, nor identifying duplicate invoices (based upon the net sum analysis performed by a computer), nor communicating a duplicate invoice rejection back to the vendor. Nowhere in the art of record is there any teaching of rejecting a computer detected duplicate invoice back to a vendor before it is entered into the accounts payable database. Applicants assert that the only basis on which these teachings can be implied from Klein involves impermissible hindsight reconstruction of Klein based upon applicants own disclosure and requires that the specific teachings of Klein be discounted. Applicants claim requires that these steps be performed by a computer, and Klein specifically teaches that any identification of erroneous data in the database being sampled and audited be done by a human.

With respect to claim 8, the Examiner states that Klein does not explicitly teach preprocessing of invoices. Applicants agree. However, the Examiner then states that Geer discloses such. Applicants traverse. As previously noted, Geer relates, EN998071 21 S/N 09/244,304

at the point cited by the Examiner, to data entry into a check clearance system. Erroneous checks are not identified until much later, and then require that the entry be reversed. Applicants claim further recites the specific, computer executed algorithm for identifying duplicate invoices. Neither Geer or Klein teach such. The suggestion of the Examiner that it would be obvious to filter and sort out duplicate invoices before entry into an accounts data base as soon as the data is available requires that impermissible hindsight reconstruction of Klein and/or Geer based upon applicants own disclosure.

With respect to claim 9, the Examiner states that Klein does not explicitly teach grabbing an invoice before input to an accounts payable database, nor identifying duplicate invoices (based upon the net sum analysis performed by a computer), nor communicating a duplicate invoice rejection back to the vendor. Nowhere in the art of record is there any teaching of rejecting a computer detected duplicate invoice back to a vendor before it is entered into the accounts payable database. Applicants assert that the only basis on which these teachings can be implied from Klein involves impermissible hindsight reconstruction of Klein based upon applicants own disclosure and requires that the specific teachings of Klein be discounted. Applicants claim requires that these steps be performed by a computer, and Klein specifically teaches that any identification of erroneous data in the database being sampled and audited be done by a human.

## **RESPONSE TO ARGUMENTS**

The Examiner has responded to applicants arguments by stating:

"...Klein is not used to show preprocessing in examiner's rejection. Geer (US 5,930,778) specifically discloses system for coordinating invoice processing *at the point of receipt*, and is intended to eliminate duplicative data (column 5, lines 58-61).

Klein teaches:

"It is a further object of the present invention to eliminate duplicative data capture steps and multiple handling involved in the payee's and the bank of first deposit's handling of the same payment ..." (Column 5, lines 58-61).

What Klein goes on to teach is that at the point of receipt, the information on a check is electronically scanned and input into the system so as to avoid having that data captured at multiple places. The invoices which Klein refers to are merely payment advices, or payment stubs, used to process the payment against an accounts receivable database, not an accounts payable database. These are not, in Klein, examined to reject duplicate payment advices. Applicants traverse the suggestion that this teaches the specific preprocessing of invoices for entry into an accounts payable database as set forth in applicants claims. All of the checks submitted to the Klein system are scanned and input. Applicants are not claiming "coordinating invoice processing", but a specific algorithm for determining that a debit invoice is duplicate (which is defined to include the sum zero calculation in all of applicants claims) and if so

determined, preventing that invoice from entering the accounts payable database.

The Examiner also asserts that Geer, at Col. 5 lines 57-61, which is quoted above, teaches "invoice processing at the point of receipt, and eliminates duplicative data." This is referring to data capture, and avoiding the necessity of having more than one point in the process capture the data from the physical checks. The Examiner is using applicants own teachings and creating, at best, a mere verbal correspondence with the claims which does not give a required full appreciation to what the reference fairly suggests.

The Examiner then asserts that "one of ordinary skill in the art would recognize the original, unfiltered database of Klein's system is in effect a temporary database". Applicants claim no such "temporary database", and Klein clearly teaches that a database is being sampled, and the sample processed. The unfiltered database of Klein is used in the neural network processing of the data sampled from that database, and cannot be properly relied upon to teach applicants system or method for processing debit invoices prior to be entered into an accounts payable database.

SUMMARY AND CONCLUSION

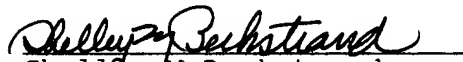
Applicants request that claims 1-11 be entered and allowed, or entered to place the case in better condition for appeal.

If, in the opinion of the Examiner, a telephone conversation with applicant(s) attorney could possibly facilitate prosecution of the case, he may be reached at the number noted below.

Sincerely,

M. W. Beach, et al

By

  
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